JC09 Rec'd PCT/PTO 16 JUN 2009

<110>	MEDEXGEN INC
	CHUNG, Yong Hoon
	CHO, Hoon Sik
	PARK, Hong Gyu
	YI, Ki Wan
	·
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Arg	Leu		Leu	Gln	PIO	Arg .		GIII	reu	ASP	GIU	125	GIY	Arg	GIII		
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Val																	1000
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Val	Ara	Glu	Ser	Pro	His	His	His	Len	Ala	Glu	Ser	Phe	Leu	Phe	Len
	450														
	430					455					460				

FLO	GIII	val	. Jei	PIC	met	wah) Ser	GIA	PIC	, itt	GIY	Cy:	2 116	. rec	1111
465					470	ı				475					480
Tyr	Arg	Asp	Gly	Phe	. Asn	Val	Ser	Ile	Met	Tyr	Asn	Let	ı Thr	Val	Leu
				485	•				490)				495	•
Gly	Leu	Glu	Pro	Pro	Thr	Ser	Ala	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr
			500	ı				505	•				510)	
His	Thr	_		Pro	Cys	Pro	Ala		Glu	Leu	Leu	_	_	Pro	Ser
		515					520					525	•		
1/ - 1	Dho	T 011	Dho	D == 0	Dwa	T	Dwa	T	7.00	mb =	T 0	Wat		C = 10	7
Val	530		File	PIO	PIO	535	Pro	гуз	Asp	1111	540		. 116	Ser	Arg
	330					333					340				
Thr	Pro	Glu	Val	Thr	Cvs	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro
545					550					555					560
Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala
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·															
Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val
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Ser	Val		Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	_	Lys	Glu	Tyr
		595		-			600					605			
T	0	*	*** 1	6	3	.	71-	•	5		5	~1 -	61	•	
	610	гуѕ	vaı	ser	Asn	_	Ala	Leu	Pro	Ala		ııe	GIU	ьys	inr
	010					615					620				
Ile	Ser	Lvs	Ala	Lvs	Glv	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tvr	Thr	Leu
625				-3-	630			5		635			-3-		640
Pro	Pro	Ser	Arg	Glu	Glu	Met	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys
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Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser
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Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp

700

Arg 705	Trp	Gln	Gln	Gly	Asn 710	Val	Phe	Ser	Cys	Ser 715		Met	His	Glu	Ala 720		
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1				5					10					15			
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Trp	Ala	Ala	Ala	His	Ala	Leu	Pro	Ala	Gln	Val	Ala	Phe	Thr	Pro	Tyr		
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-							_			-	_		tat	-		:	144
Ala	Pro		Pro	Gly	Ser	Thr		Arg	Leu	Arg	Glu		Tyr	Asp	Gln		
		35					·40					45					
													cat			;	192
Thr	Ala	GIN	met	Cys	Cys	ser	ьys	Cys	ser	Pro	GLY	GIN	His	Ala	ьys		

675

680

695

Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser

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gtc	ttc	tgt	acc	aag	acc	tcg	gac	acc	gtg	tgt	gac	tcc	: tgt	gag	gac		240	0
Val	Phe	Cys	Thr	Lys	Thr	Ser	Asp	Thr	Val	Cys	Asp	Ser	Cys	Glu	Asp			
65		_		_	70		-			75			-		80			
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agc	aca	tac	acc	cag	ctc	tgg	aac	tgg	gtt	ccc	gag	tgc	ttg	ago	tgt		288	8
Ser	Thr	Tyr	Thr	Gln	Leu	Trp	Asn	Trp	Val	Pro	Glu	Cys	Leu	Ser	Cys			
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ggc	tcc	cgc	tgt	agc	tct	gac	cag	gtg	gaa	act	caa	gcc	tgc	act	cgg	•	336	5
Gly	Ser	Arg	Cys	Ser	Ser	Asp	Gln	Val	Glu	Thr	Gln	Ala	Cys	Thr	Arg			
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gaa	cag	aac	cgc	atc	tgc	acc	tgc	agg	ccc	ggc	tgg	tac	tgc	gcg	ctg		384	1
Glu	Gln	Asn	Arg	Ile	Cys	Thr	Cys	Arg	Pro	Gly	Trp	Tyr	Cys	Ala	Leu			
		115					120					125						
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agc	aag	cag	gag	ggg	tgc	cgg	ctg	tgc	gcg	ccg	ctg	cgc	aag	tgc	cgc		432	2
Ser	Lys	Gln	Glu	Gly	Cys	Arg	Leu	Cys	Ala	Pro	Leu	Arg	Lys	Cys	Arg			
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Pro	Gly	Phe	Gly	Val	Ala	Arg	Pro	Gly	Thr	Glu	Thr	Ser	Asp	Val	Val			
145					150					155					160			
tgc	aag	ccc	tgt	gcc	ccg	ggg	acg	ttc	tcc	aac	acg	act	tca	tcc	acg		528	t
Cys	Lys	Pro	Cys	Ala	Pro	Gly	Thr	Phe	Ser	Asn	Thr	Thr	Ser	Ser	Thr			
•				165					170					175		•		•
gat	att	tgc	agg	ccc	cac	cag	atc	tgt	aac	gtg	gtg	gcc	atc	cct	ggg		576	;
Asp	Ile	Cys	Arg	Pro	His	Gln	Ile	Cys	Asn	Val	Val	Ala	Ile	Pro	Gly			
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aat	gca	agc	atg	gat	gca	gtc	tgc	acg	tcc	acg	tcc	ccc	acc	cgg.	agt		624	
Asn	Ala	Ser	Met	Asp	Ala	Val	Cys	Thr	Ser	Thr	Ser	Pro	Thr	Arg	Ser			
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Met	Ala	Pro	Gly	Ala	Val	His	Leu	Pro	Gln	Pro	Val	Ser	Thr	Arg	Ser			

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							-					_		_	tgc Cys		816
			260	•				265					270				
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		275					280					285	•				
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	_					gtg Val											1008
				325					330					335	•	**	
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014	GIII	171	340	361	1111	TYL	ALG	345	Vai		vai	Leu	350	vai	rea		
cac																	1104
His	GIII	355	itp	rea	ASN	GIÀ	360	GIU	Tyr	ьуs	Cys	ъуs 365	vai	Ser	Asn		
aaa																	1152
Lys :	AIA	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly		

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Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu			
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ctg	acc	aag	aac	cag	gtc	agc	ctg	acc	tgc	ctg	gtc	aaa	ggc	ttc	tat		124	В
Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr			
				405					410					415				
ccc	agc	gac	atc	gcc	gtg	gag	tgg	gag	agc	aat	ggg	cag	ccg	gag	aac		129	6
Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn			
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aac	tac	aag	acc	acg	cct	ccc	gtg	ctg	gac	tcc	gac	ggc	tcc	tcc	ttc		134	4
Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Ser	Phe			
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ctc	tac	agc	aag	ctc	acc	gtg	gac	aag	agc	agg	tgg	cag	cag	ggg	aac		1392	2
Leu	Tyŗ	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn			
	450					455					460							
gtc	ttc	tca	tgc	tcc	gtg	atg	cat	gag	gct	ctg	cac	aac	cac	tac	acg		1440)
Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn	His	Tyr	Thr			
465					470					475					480			
cag	aag	agc	ctc	tcc	ctg	tct	ccg	ggt	aaa		tga						1473	3
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Trp	Ala	Ala	Ala 20		a Ala	Leu	Pro	Ala 25		\Val	Ala	Phe	Thr		Tyr
Ala	Pro	Glu 35		Gly	Ser	Thr	Cys 40		Leu	Arg	Glu	Tyr 45		Asp	Gln
Thr	Ala		Met	Cys	Cys	Ser 55	_	Cys	Ser	Pro	Gly 60	Gln	His	Ala	Lys
Val 65		Cys	Thr	Lys	Thr 70	Ser	Asp	Thr	Val	Cys 75	Asp	Ser	Cys	Glu	Asp 80
Ser	Thr	Tyr	Thr	Gln 85	Leu	Trp	Asn	Trp	Val 90		Glu	Cys	Leu	Ser 95	Cys
Gly	Ser	Arg	Cys 100	Ser	Ser	Asp	Gln	Val 105	Glu	Thr	Gln	Ala	Cys 110	Thr	Arg
Glu	Gln	Asn 115	Arg	Ile	Cys	Thr	Cys 120	Arg	Pro	Gly	Trp	Tyr 125	Cys	Ala	Leu
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Pro 145	Gly	Phe	Gly	Val	Ala 150	Arg	Pro	Gly	Thr	Glu 155	Thr	Ser	Asp	Val	Val 160
Cys	Lys	Pro	Cys	Ala 165	Pro	Gly	Thr	Phe	Ser 170	Asn	Thr	Thr	Ser	Ser 175	Thr
Asp	Ile	Cys	Arg 180	Pro	His	Gln	Ile	Cys 185	Asn	Val	Val	Ala	Ile 190	Pro	Gly
Asn	Ala	Ser 195	Met	Asp	Ala	Val	Cys 200	Thr	Ser	Thr	Ser	Pro 205	Thr	Arg	Ser
Met	Ala 210	Pro	Gly	Ala	Val	His 215	Leu	Pro	Gln	Pro	Val 220	Ser	Thr	Arg	Ser
Gln	His	Thr	Gln	Pro	Thr	Pro	Glu	Pro	Ser	Thr	Ala	Pro	Ser	Thr	Ser

225					230					235					240
Phe	Leu	Leu	Pro	Met 245	Gly	Pro	Ser	Pro	Pro 250		Glu	Gly	Ser	Thr 255	Gly
Asp	Ala	Glu	Pro 260	_	Ser	Cys	Asp	Lys 265	Thr	His	Thr	Cys	Pro 270		Cys
Pro	Ala	Pro 275		Leu	Leu	Gly	Gly 280	Pro	Ser	Val	Phe	Leu 285	Phe	Pro	Pro
Lys	Pro 290	_	Asp	Thr	Leu	Met 295	Ile	Ser	Arg	Thr	Pro 300	Glu	Val	Thr	Cys
Val 305	Val	Val	Asp	Val	Ser 310	His	Glu	Asp	Pro	Glu 315	Val	Lys	Phe	Asn	Trp 320
Tyr	Val	Asp	Gly	Val 325	Glu	Val	His	Asn	Ala 330	Lys	Thr	Lys	Pro	Arg 335	Glu
Glu	Gln	Tyr	Asn 340	Ser	Thr	Tyr	Arg	Val 345	Val	Ser	Val	Leu	Thr 350	Val	Leu
His	Gln	Asp 355	Trp	Leu	Asn	Gly	Lys 360	Glu	Tyr	Lys	Cys	Lys 365	Val	Ser	Asn
Lys	Ala 370	Leu	Pro	Ala	Pro	Ile 375	Glu	Lys	Thr	Ile	Ser 380	Lys	Ala	Lys	Gly
Gln 385	Pro	Arg	Glu	Pro	Gln 390	Val	Tyr	Thr	Leu	Pro 395	Pro	Ser	Arg	Asp	Glu 400
Leu	Thr	Lys	Asn	Gln 405	Val	Ser	Leu	Thr	Cys 410	Leu	Val	Lys	Gly	Phe 415	Tyr
Pro	Ser	Asp	Ile 420	Ala	Val	Glu	Trp	Glu 425	Ser	Asn	Gly	Gln	Pro 430	Glu	Asn
sn	Tyr	Lys 435	Thr	Thr	Pro		Val 440	Leu	Asp	Ser	Asp	Gly 445	Ser	Ser	Phe

Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn		
	450					455					460						
Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn	His	Tvr	Thr		
465			•		470					475				- 2 -	480		
															100		
Gln	Lve	Sor	T.e.ii	Ser	Len	Sar	Pro	Gly	Tue								
GIII	БуЗ	Jer	Бец	485	Deu	261	110	Gly	490								
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tgg	gct	gcg	gcg	cac	gcc	ttg	ccc	gcc	cag	gtg	gca	ttt	aca	ccc	tac		96
				His											•		
•			20					25					30		•		
acc	cca	gag	CCC	ggg	age	aca	tac	caa	ctc	aga	naa	tac	tat	ra c	cad	1.	44
				Gly	-		_			_	-			_	_	-	
AIG	110	35	110	Gry	Jer	1111	-	Arg	пец	ALG	Giu	_	TYL	лэр	GIII		
		55					40					45					
																.	22
				tgc												13	92
ınr		GIN	wet	Cys	Cys		ьys	Cys	ser	Pro		GIN	HIS	Ala	гàг		
	50					55					60						
																_	

gtc ttc tgt acc aag acc tcg gac acc gtg tgt gac tcc tgt gag gac

240

Val 65	Phe	Cys	Thr	Lys	Thr		Asp	Thr	Val	Cys 75	•	Ser	Cys	Glu	Asp 80		
-									_			-	_	-	tgt		288
Ser	Thr	Tyr	Thr		Leu	Trp	Asn	Trp		Pro	Glu	Cys	Leu		Cys		
				85					90					95			
ggc	tcc	cgc	tgt	agc	tct	gac	cag	gtg	gaa	act	caa	gcc	tgc	act	cgg		336
Gly	Ser	Arg	Cys	Ser	Ser	Asp	Gln	Val	Glu	Thr	Gln	Ala	Cys	Thr	Arg		
			100					105					110				
gaa	cag	aac	cgc	atc	tgc	acc	tgc	agg	ccc	ggc	tgg	tac	tgc	gcg	ctg		384
Glu	Gln	Asn	Arg	Ile	Cys	Thr	Cys	Arg	Pro	Gly	Trp	Tyr	Cys	Ala	Leu		
		115					120					125					
agc	aag	cag	gag	ggg	tgc	cgg	ctg	tgc	gcg	ccg	ctg	cgc	aag	tgc	cgc		432
Ser	_	Gln	Glu	Gly	Cys	Arg	Leu	Cys	Ala			Arg	Lys	Cys	Arg		
	130					135					140						-
ccg	ggc	ttc	ggc	gtg	gcc	aga	сса	gga	act	gaa	aca	tca	gac	gtg	gtg		480
Pro	Gly	Phe	Gly	Val	Ala	Arg	Pro	Gly	Thr	Glu	Thr	Ser	Asp	Val	Val		
145					150					155					160		
4																	500
_	_		_	_	_	ggg	-				-				_		528
Cys	гу	FIO	Cys	165	PIO	Gly	1111	File	170	ASII	1111	1111	Ser	175	IIIL		
				103					170					1/5			
gat	att	tgc	agg	ccc	cac	cag	atc	tgt	aac	gtg	gtg	gcc	atc	cct	ġgg		576
Asp	Ile	Cys	Arg	Pro	His	Gln	Ile	Cys	Asn	Val	Val	Ala	Ile	Pro	Gly		
			180					185					190				
22+	aca	age	ato	cat	aca	gtc	tac	a.c.a	tcc	300	tcc		200	caa	ant		624
						Val	_	_		_					-		024
		195					200		001			205		9	001	•	
atg	gcc	cca	ggg	gca	gta	cac	tta	ccc	cag	cca	gtg	tcc	aca	cga	tcc		672
Met	Ala	Pro	Gly	Ala	Val	His	Leu	Pro	Gln	Pro	Val	Ser	Thr	Arg	Ser		
	210					215			•		220						
																•	700
caa	Cac	acg	cag	cca	act	cca	yaa	CCC	agc	act	gct	cca	agc	acc	CCC		720

Gln	His	Thr	Gln	Pro	Thr	Pro	Glu	Pro	Ser	Thr	Ala	Pro	Ser	Thr	Ser			
225					230					235	•				240			
ttc	ctg	ctc	сса	atq	ggc	ccc	ago	ccc	cca	gct	gaa	qqq	ago	gga	tcc		-	768
Phe	Leu	Leu	Pro	Met	Glv	Pro	Ser	Pro	Pro	Ala	Glu	Glv	Ser	Glv	Ser			
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aac	gca	act	aca	ccc	tac	qcc	ccq	gag	ccc	ggg	ago	aca	tac	caa	ctc		8	316
						_	_	Glu			-		_					
			260		_			265		_			270	-				
aga	gaa	tac	tat	gac	cag	aca	gct	cag	atg	tgc	tgc	agc	aaa	tgc	tcg		8	64
Arg	Glu	Tyr	Tyr	Asp	Gln	Thr	Ala	Gln	Met	Cys	Cys	Ser	Lys	Cys	Ser			
		275		_			280				_	285	_	_				
											:							
ccg	ggc	caa	cat	gca	aaa	gtc	ttc	tgt	acc	aag	acc	tcg	gac	acc	gtg		9	12
Pro	Gly	Gln	His	Ala	Lys	Val	Phe	Cys	Thr	Lys	Thr	Ser	Asp	Thr	Val			
	290					295					300							
tgt	gac	tcc	tgt	gag	gac	agc	aca	tac	acc	cag	ctc	tgg	aac	tgg	gtt		9	60
Cys	Asp	Ser	Cys	Glu	Asp	Ser	Thr	Tyr	Thr	Gln	Leu	Trp	Asn	Trp	Val			
305					310					315					320			
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ccc	gag	tgc	ttg	agc	tgt	ggc	tcc	cgc	tgt	agc	tct	gac	cag	gtg	gaa		10	08
Pro	Glu	Cys	Leu	Ser	Cys	Gly	Ser	Arg	Cys	Ser	Ser	Asp	Gln	Val	Glu			
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act	caa	gcc	tgc	act	cgg	gaa	cag	aac	cgc	atc	tgc	acc	tgc	agg	çcc		10	56
Thr	Gln	Ala	Cys	Thr	Arg	Glu	Gln	Asn	Arg	Ile	Cys	Thr	Cys	Arg	Pro	•		
			340					345					350					
ggc	tgg	tac	tgc	gcg	ctg	agc	aag	cag	gag	ggg	tgc	cgg	ctg	tgc	gcg		110	04
Gly	Trp	Tyr	Cys	Ala	Leu	Ser	Lys	Gln	Glu	Gly	Cys	Arg	Leu	Cys	Ala			
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ccg	ctg	cgc	aag	tgc	cgc	ccg	ggc	ttc	ggc	gtg	gcc	aga	cca	gga	act		115	52
Pro	Leu	Arg	Lys	Cys	Arg	Pro	Gly	Phe	Gly	Val	Ala	Arg	Pro	Gly	Thr			
	370					375					380							
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gaa	aca	tca	gac	gtg	gtg	tgc	aag	ccc	tgt	gcc	ccg	ggg	acg	ttc	tcc		120	00

	Thr	Ser	Asp	Val		-	Lys	Pro	Cys			Gly	Thr	Phe	Ser		
385					390					395					400		
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Asn	Thr	Thr	Ser	Ser	Thr	Asp	Ile	Cys	Arg	Pro	His	Gln	Ile	Cys	Asn		
				405					410					4 1 5			
gtg	gtg	gcc	atc	cct	ggg	aat	gca	agc	atg	gat	gca	gtc	tgc	acg	tcc		1296
Val	Val	Ala	Ile	Pro	Gly	Asn	Ala	Ser	Met	Asp	Ala	Val	Cys	Thr	Ser		
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acg	tcc	ccc	acc	cgg	agt	atg	gcc	cca	ggg	gca	gta	cac	tta	ccc	cag		1344
Thr	Ser	Pro	Thr	Arg	Ser	Met	Ala	Pro	Gly	Ala	Val	His	Leu	Pro	Gln		
		435					440					445					
cca	gtg	tcc	aca	cga	tcc	caa	cac	acg	cag	cca	act	сса	gaa	ccc	agc		1392
Pro	Val	Ser	Thr	Arg	Ser	Gln	His	Thr	Gln	Pro	Thr	Pro	Glu	Pro	Ser		
*	450					455					460						
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Thr	Ala	Pro	Ser	Thr	Ser	Phe	Leu	Leu	Pro	Met	Gly	Pro	Ser	Pro	Pro		
465					470					475					480		
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Ala	Glu	Gly	Ser	Thr	Gly	Asp	Ala	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr		
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cac	aca	tgc	cca	ccg	tgc	cca	gca	cct	gaa	ctc	ctg	ggg	gga	ccg	tca		1536
His	Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser		
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gtc	ttc	ctc	ttc	ccc	cca	aaa	ccc	aag	gac	acc	ctc	atg	atc	tcc	cgg		1584
Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg		
		515		*			520					525					
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acc	cct	gag	gtc	aca	tgc	gtg	gtg	gtg	gac	gtg	agc	cac	gaa	gac	cct		1632
Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro		
	530					535					540						
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Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala		
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			_			Glu	_			_	-				-		
-		3		565				-3-	570			- 2 -	5	575			
				000					3.0					3,3			
agc	atc	ctc	acc	atc	cta	cac	cac	G2C	taa	cta	2 2 t	aac	220	a=a	tac		1776
					_	His	_	•		_			_				1770
361	Vai			vai	пеп	птэ	GIII	_	пр	reu	ASII	GIY	-	GIU	ıyı		
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Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys		
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Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser		
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aat	ggg	cag	ccg	gag	aac	aac	tac	aaq	acc	acq	cct	ccc	ata	ctq	gac		2016
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	-		660					665					670				
tcc	gac	aac	tcc	tcc	ttc	ctc	tac	agc	220	ctc	200	ata	asc	aan	200		2064
						Leu		_	_				-	-	-		2003
501		675	DCI		1110	Deu	680	Jer	БуЗ	ъсц	1111	685	лэр	БуЗ	Jer		
		0,5					000					003					
200	+ ~ ~	C 2 C	C 3 C	~~~	222	a+ a	++-	+	+~-	+	~+-	- + -		~~~	~~+		2112
						gtc			_		-	-			-		2112
AT.G		GTU	GIN	стА	ASN	Val	rne	ser	cys	ser		met	HIS	GIU	АТА		
	690					695					700						
ctg	cac	aac	cac	tac	acg	cag	aag	agc	ctc	tcc	ctg	tct	ccg	ggt	aaa		2160

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145	•				150					155	•				160
Cys	Lys	s Pro	Cys	165		Gly	Thr	Phe	9 Ser		Thr	Thr	Ser	Ser 175	
Asp	Ile	Cys	180	Pro	His	Gln	ı Ile	Cys 185		val	Val	Ala	11e		61y
Asn	Ala	Ser 195		Asp	Ala	Val	Cys 200		Ser	Thr	Ser	Pro 205		Arg	Ser
Met	Ala 210		Gly	Ala	Val	His 215		Pro	Gln	Pro	Val 220		Thr	Arg	Ser
Gln 225		Thr	Gln	Pro	Thr 230	Pro	Glu	Pro	Ser	Thr 235	Ala	Pro	Ser	Thr	Ser 240
Phe	Leu	Leu	Pro	Met 245	Gly	Pro	Ser	Pro	Pro 250		Glu	Gly	Ser	Gly 255	
Asn	Ala	Thr	Thr 260	Pro	Tyr	Ala	Pro	Glu 265	Pro	Gly	Ser	Thr	Cys 270	Arg	Leu
Arg	Glu	Туг 275	Tyr	Asp	Gln	Thr	Ala 280	Gln	Met	Cys	Cys	Ser 285	Lys	Cys	Ser
Pro	Gly 290	Gln	His	Ala	Lys	Val 295	Phe	Cys	Thr	Lys	Thr 300	Ser	Asp	Thr	Val
Суs 305	Asp	Ser	Cys	Glu	Asp 310	Ser	Thr	Tyr	Thr	Gln 315	Leu	Trp	Asn	Trp	Val 320
Pro	Glu	Cys	Leu	Ser 325	Cys	Gly	Ser	Arg	Cys 330	Ser	Ser	Asp	Gln	Val 335	Glu
Thr	Gln	Ala	Cys 340	Thr	Arg	Glu	Gln	Asn 345	Arg	Ile	Cys	Thr	Cys 350	Arg	Pro
Gly	Trp	Tyr 355	Cys	Ala	Leu	Ser	Lys 360	Gln	Glu	Gly	Cys ·	Arg 365	Leu	Cys	Ala

Pro	Leu 370	_	Lys	Cys	Arg	Pro 375	Gly	Phe	Gly	Val	Ala 380	_	Pro	Gly	Thr
Glu 385	Thr	Ser	Asp	Val	Val 390	Cys	Lys	Pro	Cys	Ala 395	Pro	Gly	Thr	Phe	Ser 400
Asn	Thr	Thr	Ser	Ser 405	Thr	Asp	Ile	Cys	Arg 410	Pro	His	Gln	Ile	Cys 415	Asn
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Pro	Val 450	Ser	Thr	Arg	Ser	Gln 455	His	Thr	Gln	Pro	Thr 460	Pro	Glu	Pro	Ser
Thr 465	Ala	Pro	Ser	Thr	Ser 470	Phe	Leu	Leu	Pro	Met 475	Gly	Pro	Ser	Pro	Pro 480
Ala	Glu	Gly	Ser	Thr 485	Gly	Asp	Ala	Glu	Pro 490	Lys	Ser	Cys	Asp	Lys 495	Thr
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Val [^]	Phe	Leu 515	Phe	Pro	Pro	Lys	Pro 520	Lys	Asp	Thr	Leu	Met 525	Ile	Ser	Arg
Thr	Pro 530	Glu	Val	Thr	Cys	Val 535	Val	Val	Asp	Val	Ser 540	His	Glu	Asp	Pro
Glu 545	Val	Lys	Phe	Asn	Trp 550	Tyr	Val	Asp	Gly	Val 555	Glu	Val	His	Asn	Ala 560
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Ile	Ser 610	Lys	Ala	Lys	Gly	Gln 615	Pro	Arg	Glu	Pro	Gln 620	Val	Tyr	Thr	Leu
Pro 625	Pro	Ser	Arg	Asp	Glu 630	Leu	Thr	Lys	Asn	G1n 635	Val	Ser	Leu	Thr	Cys 640
Leu	Val	Lys	Gly	Phe 645	Tyr	Pro	Ser	Asp	11e 650	Ala	Val	Glu	Trp	Glu 655	Ser
Asn	Gly	Gln	Pro 660	Glu	Asn	Asn	Tyr	Lys 665	Thr	Thr	Pro	Pro	Val 670	Leu	Asp
Ser	Asp	Gly 675	Ser	Ser	Phe	Leu	Tyr 680	Ser	Lys	Leu	Thr	Val 685	Asp	Lys	Ser
Arg	Trp 690	Gln	Gln	Gly	Asn	Val 695	Phe ·	Ser	Cys	Ser	Val 700	Met	His	Glu	Ala
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Thr	Trp		Ala	Leu	GIY	Gin		11e	Asn	Leu	Asp		Pro	Ser	Pne		
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caa	ato	agt	aat	gat	att	gac	cat	ata	222	taa	maa	222	act	tca	gac		192
	_	_	-	Asp		-	-				_				-	•	
02	50					55			~, ~		60	_,					
						•											
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Lys	Lys	Lys	Ile	Ala	Gln	Phe	Arg	Lys	Glu	Lys	Glu	Thr	Phe	Lys	Glu		
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aaa	gat	aca	tat	aag	cta	ttt	aaa	aat	gga	act	ctg	äaa	att	aag	cat	2	288
Lys	Asp	Thr	Tyr	Lys	Leu	Phe	Lys	Asn	Gly	Thr	Leu	Lys	Ile	Lys	His		
				85					90					95			
ctg	aag	acc	gat	gat	cag	gat	atc	tac	aag	gta	tca	ata	tat	gat	aca	3	336
Leu	Lys	Thr	Asp	Asp	Gln	Asp	Ile	Tyr	Lys	Val	Ser	Ile	Tyr	Asp	Thr		
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aaa	gga	aaa	aat	gtg	ttg	gaa	aaa	ata	ttt	gat	ttg	aag	att	caa	gag	3	384
Lys	Gly	Lys	Asn	Val	Leu	Glu	Lys	Ile	Phe	Asp	Leu	Lys	Ile	Gln	Glu		
		115					120					125					
	-			cca	-					-					_	4	132
Arg		Ser	ьуѕ	Pro	ьуs		ser	Trp	Thr	cys		ASII	THE	THE	ren		
	130					135					140						
acc	tat	gag	gta	atg	aat	gga	act	gac	ccc	gaa	tta	aac	cta	tat	caa	4	80
	_	-	-	Met				-		_			_			-	
145	J, J				150	1		P		155				- 1 +	160		
1 . 3										100							

_				cta Leu 165				_		Val				-			528
		_	_	agt Ser	-			_	_		-				-		576
_	_	-		agt Ser	-			_	-	-		-					624
	_			act Thr			-		_	_		-		_			672
-		-	-	tca Ser	-								-	•			720
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_				gtc Val	-	-			-	_		-	_		_		912
				tac Tyr													960

		_						_			_		cga	_		1008
Pro	Ile	Glu	Lys	Thr 325	Ile	Ser	Lys	Ala	Lys 330	Gly	Gln	Pro	Arg	Glu 335	Pro	
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Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	
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							500					303				
gtg	gag	tgg	gag	agc	aat	ggg	cag	ccg	gag	aac	aac	tac	aag	acc	acg	1152
Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	
	370					375					380					
					4											
			-	-		_							agc Ser	_		1200
385	110	vai	пеп	rsb	390	vsh	GLY	Ser	FIIE	395	ьeu	ıyı	Ser	гу	400	
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acc	gtg	gac	aag	agc	agg	tgg	cag	cag	ggg	aac	gtc	ttc	tca	tgc	tcc	1248
Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	
				405					410					415		
				4												
					_					_	_		agc Ser			1296
Vai	.,		420	nia.	Dea	1113	Non	425	TYL	1111	GIII	БУЗ	430	Бец	361	
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Met	ser	rne	LTO (Cy5	гÀ2	rne	vaı .	HIS !	ser	rue .	Leu	Leu	ı.e	rne i	ASN	

1				5					10					15	
Val	Ser	Ser	Lys 20	Gly	Ala	Val	Ser	Lys 25	Glu	Ile	Thr	Asn	Ala 30		Glu
Thr	Trp	Gly 35	Ala	Leu	Gly	Gln	Asp 40	Ile	Asn	Leu	Asp	Ile . 45		Ser	Phe
Gln	Met 50		Asp	Asp	Ile	Asp 55	Asp	Ile	Lys _.	Trp	G1u 60	Lys	Thr	Ser	Asp
Lys 65	Lys	Lys	Ile	Ala	Gln 70	Phe	Arg	Lys	Glu	Lys 75	Glu	Thr	Phe	Lys	Glu 80
Lys	Asp	Thr	Tyr	Lys 85	Leu	Phe	Lys	Asn	Gly 90	Thr	Leu	Lys	Ile	Lys 95	His
Leu	Lys	Thr	Asp 100	Asp	Gln	Asp	Ile	Tyr 105	Lys	Val	Ser	Ile	Tyr 110	Asp	Thr
Lys	Gly	Lys 115	Asn	Val	Leu	Glu	Lys 120	Ile	Phe	Asp	Leu	Lys 125	Ile	Gln	Glu
Arg	Val 130	Ser	Lys	Pro	Lys	Ile 135	Ser	Trp	Thr	Cys	Ile 140	Asn	Thr	Thr	Leu
Thr 145	Cys	Glu	Val	Met	Asn 150	Gly	Thr	Asp	Pro	Glu 155	Leu	Asn	Leu	Tyr	Gln 160
Asp	Gly	Lys	His	Leu 165	Lys	Leu	Ser	Gln	Arg 170	Val	Ile	Thr	His	Lys 175	Trp
Thr	Thr	Ser	Leu 180	Ser	Ala	Lys	Phe	Lys 185	Cys	Thr	Ala	Gly	Asn 190	Lys	Val
Ser	Lys	Glu 195	Ser	Ser	Val	Glu	Pro 200	Val	Ser	Cys	Pro	Ala 205	Glu	Pro	Lys
	Cys 210	Asp	Lys	Thr		Thr 215	Cys	Pro	Pro	Cys	Pro 220	Ala	Pro	Glu	Leu

Leu	Gly	/ Gly	, Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr
225					230					235	5				240
ī.en	Met	Tle	Ser	· Ara	Thr	Pro	Glu	V=1	Thr	· Cue		U a l	V-1	7.00	Val
Jea			. 501			110	910	V 6.1			, va1	. vaı	. vai	_	
				245					250)				255	
Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Туг	Val	Asp	Gly	Val
			260					265					270		
Glu	Val	His	Asn	Ala	Lvs	Thr	Lvs	Pro	Ara	Glu	Glu	Gln	Tur	Asn	Ser
		275			2,5			110	**** 9	010	. 010			non	361
		213	'				280					285			
Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu
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Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala
305	_	_		-	310	-	-			315	-				320
										0.0					320
D	-1 -	61	•	5 03-	-1	_	_		_			_	_		_
PIO	116	GIU	ьys	Thr	тте	Ser	гÀ2	Ala	_	GIY	GIn	Pro	Arg	Glu	Pro
				325					330					335	
Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln
			340					345					350		
Val	Ser	T.eu	Thr	Cys	T.e.11	Val	T.ve	Glv	Dha	Tur	Pro	Sar	n en	Tla	בות
	J 0.1		****	0,5	DC u	• 41		Gry	Line	TYL	110		лэр	116	ATG
		355					360					365			
Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr
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Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tvr	Ser	Lvs	Leu
385				•	390	•	_			395		- , -		-1-	400
000					330					393					400
rhr	val	Asp	ГÀЗ	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser
				405					410					415	
Val i	Met	His	Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser
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				ggt												96	
Val	Ser	Ser	_	Gly	Ala	Val	Ser	_	Glu	Ile	Thr	Asn		Leu	Glu		
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acc	taa	aat	acc	ttg	aat	can	aac	atc	220	tta	asc	att	cct	act	+++	144	
				Leu		_	_			_	_			_		714	
		35			,		40					45					
caa	atg	agt	gat	gat	att	gac	gat	ata	aaa	tgg	gaa	aaa	act	tca	gac	 192	
Gln	Met	Ser	Asp	Asp	Ile	Asp	Asp	Ile	Lys	Trp	Glu	Lys	Thr	Ser	Asp		
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Lys	Lys	Lys	Ile	Ala	Gln	Phe	Arg	Lys	Glu	Lys	Glu	Thr	Phe	Lys	Glu		
65					70				•	75					80		
					-4										L.		
				aag												288	
гàг	vah	THE	TÀT	Lys 85	rea	rne	гÀг	ASN	90 GIÀ	mr	ьeu	тÀ2	тте	ьуs 95	nıs		
				00					90					93	-		

Leu Ser Pro Gly Lys

_	_		-	gat Asp	_	-			_	-			-			336
	,,,			gtg Val	_	-				-	•	-				384
	_			cca Pro	_					_						432
	-		-	atg Met				_		-						480
_				cta Leu 165				_		-			_			528
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_	-	_		agt Ser	-			_	-	-				_		624
	_	_	-	acc Thr			_	_		_	-		_	-	-	672
		-		caa Gln	-	_	-	•		-	•			-		720
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act	ttc	aag	gaa	aaa	gat	aca	tat	aag	cta	ttt	aaa	aat	gga	act	ctg	816
Thr	Phe	Lys	Glu	Lys	Asp	Thr	Tyr	Lys	Leu	Phe	Lys	Asn	Gly	Thi	Leu	
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			•													
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Lys	Ile	Lys	His	Leu	Lys	Thr	Asp	Asp	Gln	Asp	Ile	Tyr	Lys	Val	Ser	
		275					280	•				285				
ata	tat	gat	aca	aaa	gga	aaa	aat	gtg	ttg	gaa	aaa	ata	ttt	gat	ttg	912
Ile	Tyr	Asp	Thr	Lys	Gly	Lys	Asn	Val	Leu	Glu	Lys	Ile	Phe	Asp	Leu	
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															•	
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Lys	Ile	Gln	Glu	Arg	Val	Ser	Lys	Pro	Lys	Ile	Ser	Trp	Thr	Cys	Ile	
305					310					315					320	
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Asn	Thr	Thr	Leu	Thr	Cys	Glu	Val	Met	Asn	Gly	Thr	Asp	Pro	Glu	Leu.	
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aac	ctg	tat	caa	gat	ggg	aaa	cat	cta	aaa	ctt	tct	cag	agg	gtc	atc	1056
Asn	Leu	Tyr	Gln	Asp	Gly	Lys	His	Leu	Lys	Leu	Ser	Gln	Arg	Val	Ile	
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aca	cac	aag	tgg	acc	acc	agc	ctg	agt	gca	aaa	ttc	aag	tgc	aca	gca	1104
Thr	His	Lys	Trp	Thr	Thr	Ser	Leu	Ser	Ala	Lys	Phe	Lys	Cys	Thr	Ala	
		355					360					365				
ggg	aac	aaa	gtc	agc	aag	gaa	tcc	agt	gtc	gag	cct	gtc	agc	tgt	cct	 1152
Gly	Asn	Lys	Val	Ser	Lys	Glu	Ser	Ser	Val	Glu	Pro	Val	Ser	Cys	Pro	
	370					375					380					
gca	gag	ccc	aaa	tct	tgt	gac	aaa	act	cac	aca	tgc	сса	ccg	tgc	cca	1200
Ala	Glu	Pro	Lys	Ser	Суѕ	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	
385					390					395					400	
gca	cct	gaa	ctc	ctg	ggg	gga	ccg	tca	gtc	ttc	ctc	ttc	ccc	cca	aaa	1248
Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val.	Phe	Leu	Phe	Pro	Pro	Lys	
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ccc	aag	gac	acc	ctc	atg	atc	tcc	cgg	acc	cct	gag	gtc	aca	tgc	gtg	1296
Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	
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gtg	gtg	gac	gtg	agc	cac	gaa	gac	cct	gag	gtc	aag	ttc	aac	tgg	tac	1344
Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	
		435					440					445		_	_	
ata	gac	aac	ata	gag	ata	cat	aat	acc	aaq	aca	aaσ	cca	caa	σασ	gag	1392
						His		_	_		_	_				
	450	Cry	•41	010	• • • •	455	11011	*****	2,5		460	110	9	014	014	
	450					433					400					
C 3 C	tac	220	3.00	200	tac	caa	ata	atc	3.00	at c	ctc	3.00	a+c	+ a+	Cac	1440
_			_	-		cgg		-	-	_			_	_		1440
	ıyı	ASII	ser	Inr	-	Arg	vai	vai	ser		rea	1111	vai	Cys		
465					470					475					480	
	_					aag			_	_		-				1488
Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	
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gcc	ctc	cca	gcc	ccc	atc	gag	aaa	acc	atc	tcc	aaa	gcc	aaa	ggg	cag	1536
Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	
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ccc	cga	gaa	сса	cag	gtg	tac	acc	ctg	ccc	cca	tcc	cgg	gat	gag	ctg	1584
Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	
		515				•	520					525				
						•										
acc	aag	aac	cag	gtc	agc	ctg	acc	tgc	ctg	gtc	aaa	ggc	ttc	tat	ccc	 1632
Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	
	530					535					540					
agc	gac	atc	gcc	gtg	gag	tgg	gag	agc	aat	ggg	cag	ccg	gag	aac	aac	1680
_	_		-			Trp		_			_	_	_			
545	•				550					555					560	
															-	
tac	aaq	acc	aco	cct	CCC	gtg	cta	aac	tcc	gac	aac	tcc	ttc	ttc	ctc	1728
			_			Val	_	-		-	-					1,20
- Y -	ay s	****	**1T			4 CL T	₩C.U	vah		nap	G + y	Jer			Jeu	
				565					570					575		

tac agc aag ctc acc gtg gac aag agc agg tgg cag cag ggg aac gtc 1776 Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val 585 590 ttc tca tgc tcc gtg atg cat gag gct ctg cac aac cac tac acg cag 1824 Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln 595 aag agc ctc tcc ctg tct ccg ggt aaa tga 1854 Lys Ser Leu Ser Leu Ser Pro Gly Lys 610 615 <210> 18 <211> 617 <212> PRT <213> Homo sapiens <400> 18 Met Ser Phe Pro Cys Lys Phe Val Ala Ser Phe Leu Leu Ile Phe Asn 10 15 Val Ser Ser Lys Gly Ala Val Ser Lys Glu Ile Thr Asn Ala Leu Glu 20 Thr Trp Gly Ala Leu Gly Gln Asp Ile Asn Leu Asp Ile Pro Ser Phe 35 Gln Met Ser Asp Asp Ile Asp Asp Ile Lys Trp Glu Lys Thr Ser Asp 50 55 Lys Lys Ile Ala Gln Phe Arg Lys Glu Lys Glu Thr Phe Lys Glu 65 80 Lys Asp Thr Tyr Lys Leu Phe Lys Asn Gly Thr Leu Lys Ile Lys His 85 Leu Lys Thr Asp Asp Gln Asp Ile Tyr Lys Val Ser Ile Tyr Asp Thr 100 105

Lys	Gly	Lys 115		Val	Leu	Glu	Lys 120		Phe	Asp	Leu	Lys 125		Gln	Glu
Arg	Val 130		Lys	Pro	Lys	Ile 135		Trp	Thr	Cys	Ile 140		Thr	Thr	Leu
Thr 145	Cys	Glu	Val	Met	Asn 150	Gly	Thr	Asp	Pro	Glu 155	Leu	Asn	Leu	Tyr	Gln 160
Asp	Gly	Lys	His	Leu 165	Lys	Leu	Ser	Gln	Arg 170	Val	Ile	Thr	His	Lys 175	Trp
Thr	Thr	Ser	Leu 180		Ala	Lys	Phe	Lys 185	Cys	Thr	Ala	Gly	Asn 190	Lys	Val
Ser	Lys	Glu 195	Ser	Ser	Val	Glu	Pro 200	Val	Ser	Cys	Pro	Lys 205	Glu	Ile	Thr
Asn	Ala 210	Leu	Glu	Thr	Trp	Gly 215	Ala	Leu	Gly	Gln	Asp 220	Ile	Asn	Leu	Asp
Ile 225	Pro	Ser	Phe	Gln	Met 230	Ser	Asp	Asp	Ile	Asp 235	Asp	Ile	Lys	Trp	Glu 240
Lys	Thr	Ser	Asp	Lys 245	Lys	Lys	Ile	Ala	Gln 250	Phe	Arg	Lys	Glu	Lys 255	Glu
Thr	Phe	Lys	Glu 260	Lys	Asp	Thr	Tyr	Lys 265	Leu	Phe	Lys	Asn	Gly 270	Thr	Ļeu
Lys	Ile	Lys 275	His	Leu	Lys	Thr	Asp 280	Asp	Gln	Asp	Ile	Туг 285	Lys	Val	Ser
Ile	Tyr 290	Asp	Thr	Lys	Gly	Lys 295	Asn	Val	Leu	Glu	Lys 300	Ile	Phe	Asp	Leu
Lys 305	Ile	Gln	Glu	Arg	Val 310	Ser	Lys	Pro	Lys	Ile 315	Ser	Trp	Thr	Cys	Ile 320
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Thr	His	Lys 355	Trp	Thr	Thr	Ser	Leu 360	Ser	Ala	Lys	Phe	Lys 365	Cys	Thr	Ala
Gly	Asn 370	Lys	Val	Ser	Lys	Glu 375	Ser	Ser	Val	Glu	Pro 380	Val	Ser	Cys	Pro
Ala 385	Glu	Pro	Lys	Ser	Cys 390	Asp	Lys	Thr	His	Thr 395	Cys	Pro	Pro	Cys	Pro 400
Ala	Pro	Glu	Leu	Leu 405	Gly	Gly	Pro	Ser	Val 410	Phe	Leu	Phe	Pro	Pro 415	Lys
Pro	Lys	Asp	Thr 420	Leu	Met	Ile	Ser	Arg 425	Thr	Pro	Glu	Val	Thr 430	Cys	Val
Val	Val	Asp 435	Val	Ser	His	Glu	Asp 440	Pro	Glu	Val	Lys	Phe 445	Asn	Trp	Tyr
Val	Asp 450	Gly	Val	Glu	Val	His 455	Asn	Ala	Lys	Thr	Lys 460	Pro	Arg	Glu	Glu
Gln 465	Tyr	Asn	Ser	Thr	Tyr 470	Arg	Val	Val	Ser	Val 475	Leu	Thr	Val	Cys	His 480
Gln	Asp	Trp	Leu	Asn 485	Gly	Lys	Glu	Tyr	Lys 490	Cys	Lys	Val	Ser	Asn 495	Lys
Ala	Leu	Pro	Ala 500	Pro	Ile	Glu	Lys	Thr 505.		Ser	Lys	Ala	Lys 510	Gly	Gln
Pro	Arg	Glu 515	Pro	Gln	Val	Tyr	Thr 520	Leu	Pro	Pro	Ser	Arg 525	Asp	Glu	Leu
Thr	Lys 530	Asn	Gln	Val	Ser	Leu 535	Thr	Cys	Leu	Val	Lys 540	Gly	Phe	Tyr	Pro

Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	
545					550					555					560	
Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	
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Tvr	Ser	T.vs	T.e.u	Thr	Val	Asp	T.vs	Ser	Ara	Trn	Gln	Gln	Gly	Aen	V = 1	
- 1 -	Jer	Lys	580		***	тор	DyS	585		тъ	0111	0111	590		Vai	
			360					363					390			
D	6	0	0	**- 1			0 1		_		_		_			
Pne	Ser			Val	Met	His		Ala	Leu	His	Asn		Tyr	Thr	GIn	
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Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys								
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Met	Arg	Thr	Trp	Pro	Cys	Thr	Leu	Leu	Phe	Phe	Leu	Leu	Phe	Ile	Pro	
1				5					10					15		
gtc	ttc	tgc	aaa	gca	atg	cac	gtg	gcc	cag	cct	gct	gtg	gta	ctg	gcc	96
Val	Phe	Cys	Lys	Ala	Met	His	Val	Ala	Gln	Pro	Ala	Val	Val	Leu	Ala	
			20					25					30			
								-					-			
age	age	cga	ggc	atc	acc	agc	ttt	ata	tat	αaα	tat	aca	tct	CCa	aac	144
						Ser			_			-				
JE1	261		GIY	116	n±a	261		vaı	Cys	GLU	TAT		36T	P.LO	GIA	
		35					40					45				

	Ala			_		Val			ctt Leu		Gln	_	_	_	_	192
	50					55					60					
		_	-	_		_			atg	_				_		240
va1 65	Thr	GIU	vai	Cys	70	ALS	Thr	Tyr	Met	мет 75	сту	Asn	GIU	ьeu	80	
ttc	cta	gat	gat	tcc	atc	tgc	acg	ggc	acc	tcc	agt	gga	aat	caa	gtg	288
Phe	Leu	Asp	Asp	Ser 85	Ile	Cys	Thr	Gly	Thr 90	Ser	Ser	Gly	Asn	Gln 95	Val	
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aac	ctc	act	atc	caa	gga	ctg	agg	gcc	atg	ġac	acg	gga	ctc	tac	atc	336
Asn	Leu	Thr		Gln	Gly	Leu	Arg		Met	Asp	Thr	Gly		Tyr	Ile	
			100					105					110			
tgc	aag	gtg	gag	ctc	atg	tac	сса	ccg	cca	tac	tac	ctg	ggc	ata	ggc	384
Cys	Lys	Val	Glu	Leu	Met	Tyr	Pro	Pro	Pro	Tyr	Tyr	Leu	Gly	Ile	Gly	
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aac	gga	acc	cag	att	tat	gta	att	gat	cca	gaa	ccg	tgc	cca	gat	tct	432
Asn	Gly	Thr	Gln	Ile	Tyr	Val	Ile	Asp	Pro	Glu	Pro	Cys	Pro	Asp	Ser	
	130					135					140					
aca	gag	CCC	222	tct	tat	gac	222	act	cac	aca	tac	cca	cca	tac	cca	480
-					_	_			His		-		_	_		400
145					150					155					<u>1</u> 60	
-																500
									gtc Val							528
				165					170					175	•	
		•			_				acc			•		•		576
PIO	ьуѕ	ASP	180	Leu	Met	116	ser	185	Thr	PIO	GIU	val	190	Cys	vaı	
gtg	gtg	gac	gtg	agc	cac	gaa	gac	cct	gag	gtc	aag	ttc	aac	tgg	tac	624
Val	Val	_	Val	Ser	His		-	Pro	Glu	Val	Lys		Asn	Trp	Tyr	
		195					200					205				

	_							_	_		_	Pro		gag Glu		672
_			_	_				_	_	-			_	ctg Leu		720
-	_		_			_			_	-	•	-		aac Asn 255		768
												-		Gly		816
	-	-		-				_					_	gag Glu	-	864
					-	_		_	_	-				tat Tyr		912
-	_		_					_			-	-		aac Asn		 960
							_	_		-	-			ttc Phe 335		1008
	-	_				_	_	_			-	-		aac Asn		1056
ttc Phe		_			-	His		-	•					acg Thr	-	1104

1134

tga

Lys Ser Leu Ser Leu Ser Pro Gly Lys 370 <210> 20 <211> 377 <212> PRT <213> Homo sapiens Met Arg Thr Trp Pro Cys Thr Leu Leu Phe Phe Leu Leu Phe Ile Pro Val Phe Cys Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala 20 Ser Ser Arg Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly Lys Ala Thr Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly 120 Asn Gly Thr Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser 135 Ala Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro

aag agc ctc tcc ctg tct ccg ggt aaa

Pro Val			Thr 180	Leu	Mot										
Val	Val	T			net	Ile	Ser	Arg 185		Pro	Glu	Val	Thr 190	_	Val
		195	Val	Ser	His	Glu	Asp 200	Pro	Glu	Val	Lys	Phe 205		Trp	Tyr
Val :	Asp 210	Gly	Val	Glu	Val	His 215	Asn	Ala	Lys	Thr	Lys 220	Pro	Arg	Glu	Glu
Gln :	Tyr	Asn	Ser	Thr	Tyr 230	Arg	Val	Val	Ser	Val 235	Leu	Thr	Val	Leu	His 240
Gln 2	Asp	Trp	Leu	Asn 245	Gly	Lys	Glu	Tyr	Lys 250	Cys	Lys	Val	Ser	Asn 255	Lys
Ala 1	Leu	Pro	Ala 260	Pro	Ile	Glu	Lys	Thr 265	Ile	Ser	Lys	Ala	Lys 270	Gly	Gln
Pro A	Arg	Glu 275	Pro	Gln	Val	Tyr	Thr 280	Leu	Pro	Pro	Ser	Arg 285	Asp	Glu	Leu
Thr I	Lys 290	Asn	Gln	Val	Ser	Leu 295	Thr	Cys	Leu	Val	Lys 300	Gly	Phe	Tyr	Pro
Ser A 305	Asp	Ile	Ala	Val	Glu 310	Trp	Glu	Ser	Asn	Gly 315	Gln	Pro	Glu	Asn	Asn 320
Tyr L	Lys	Thr	Thr	Pro 325	Pro	Val	Leu	Asp	Ser 330	Asp	Gly	Ser	Phe	Phe 335	Leu
Tyr S	Ser		Leu 340	Thr	Val	Asp		Ser 345	Arg	Trp	Gln	Gln	Gly 350	Asn	Val
Phe S		Cys 355	Ser	Val	Met		Glu 360	Ala	Leu	His		His 365	Tyr	Thr	Gln

2,70	561						, Gry	. بود	,								
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1			•	5					10					15			
atc	ttc	tac	aaa	gca	ato	cac	ata	acc	сад	cct	act	ata	αta	cta	acc		96
						His	•										
		-1-	20					25					30				
agc	agc	cga	aac	atc	acc	agc	+++	ata	tat	gag	tat	aca	tct	cca	aac	1	.44
						Ser			_			_				•	
		35	3			552	40		0,5	014	- , -	45	001	110	Cly		
-		30					10					43			٠	••	
aaa	acc	act	gag	atc	caa	gtg	aca	ata	ctt	caa	cad	act	asc.	acc	cad	1	92
						Val										-	72
	50				9	55			,	9	60			001	01. .		
	-										00						
ata	act	gaa	atc	tat	aca	gca	acc	tac	ato	ato	aaa	aat	aaa	tta	200	2	40
						Ala										-	10
65				0,70	70			- , -		75	OL y	*****	014	Dea	80		
					. 0					, ,					50		
tto	cta	gat	gat	tec	atc	tgc	aca	aac	acc	tcc	acrt	uu =	aa+	C= =	ata	າ	88
						Cys										2	00
	u	- 10 p	٦.٥٢	85		Cys	****	U L y	90	261	261	G T Y	11 C	95	val		
				0.0					90					33			

aac	ctc	act	atc	caa	gga	ctg	agg	gcc	atg	gac	acg	gga	ctc	tac	atc	336
Asn	Leu	Thr	Ile	Gln	Gly	Leu	Arg	Ala	Met	Asp	Thr	Gly	Leu	Tyr	Ile	
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tgc	aag	gtg	gag	ctc	atg	tac	cca	ccg	cca	tac	tac	ctg	ggc	ata	ggc	384
Cys	Lys	Val	Glu	Leu	Met	Tyr	Pro	Pro	Pro	Tyr	Tyr	Leu	Gly	Ile	Gly	
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aac	qqa	acc	cag	att	tat	qta	att	qat	cca	gaa	ccq	tgc	cca	gat	tcg	432
				Ile		-		•		-	-	-		-		
	130				•	135		•			140	-		•		
	100															
gat	aac	atα	cac	gtg	acc	cag	cct	act	ata	gta	cta	acc	agc	agc	cga	480
_		_		Val	_	_		_		_	_	_	_		_	
145	ASII	ne c	1113	V G I	150	GIII	110	AIG	Vai	155	Бец	ALG	561	Jer	160	
143					130					133					100	
~~~	24.0	~~~	200		~+ <i>~</i>	+~+	~~~	+ > +	~~~	+ 0+	000	~~~	222	acc	act	528
		•	_	ttt		_			_							320
GIY	шe	Ala	ser	Phe	vaı	cys	GIU	туг		ser	PIO	GIA	rys		1111	
				165					170					175		
																576
	_			aca	-			_	_							576
Glu	Val	Arg		Thr	Val	Leu	Arg		Ala	Asp	Ser	Gin		Thr	Glu	
			180					185					190			
gtc	tgt	gcg	gca	acc	tac	atg	atg	ggg	aat	gag	ttg	acc	ttc	cta	gat	624
Val	Суѕ	Ala	Ala	Thr	Tyr	Met	Met	Gly	Asn	Glu	Leu	Thr	Phe	Leu	Asp	
		195					200					205				
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gat	tcc	atc	tgc	acg	ggc	acc	tcc	agt	gga	aat	caa	gtg	aac	ctc	act	672
Asp	Ser	Ile	Cys	Thr	Gly	Thr	Ser	Ser	Gly	Asn	Gln	Val	Asn	Leu	Thr	
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Ile	Gln	Gly	Leu	Arg	Ala	Met	Asp	Thr	Gly	Leu	Tyr	Ile	Суѕ	Lys	Val '	
225					230					235					240	
																•
gag	ctc	atg	tac	сса	ccg	сса	tac	tac	ctg	ggc	ata	ggc	aac	gga	acc	768
Glu	Leu	Met	Tyr	Pro	Pro	Pro	Tyr	Tyr	Leu	Gly	Ile	Gly	Asn	Gly	Thr	
				245					250					255		

				Ile	_		_		-		_		-	gag Glu		816
								_		_	-		_	cct Pro		864
				_		-								aag Lys	_	912
								•						gtg Val		960
			-	-			-	_						gac Asp 335		1008
														tac Tyr		1056
						Ser	_			-	_		-	gac Asp		 1104
_		-	_			_	_	_	-				_	ctc Leu		1152
									Ala			-		cga Arg	_	1200
	_		Tyr		_			Ser	• •	-		-		aag Lys 415		1248

cag	gtc	agc	ctg	acc	tgc	ctg	gtc	aaa	ggc	ttc	tat	ccc	agc	gac	atc		1296
Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile		
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gcc	gtg	gag	tgg	gag	agc	aat	ggg	cag	ccg	gag	aac	aac	tac	aag	acc		1344
Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr		
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acg	cct	ccc	gtg	ctg	gac	tcc	gac	ggc	tcc	ttc	ttc	ctc	tac	agc	aag		1392
Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys		
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ctc	acc	gtg	gac	aag	agc	agg	tgg	cag	cag	ggg	aac	gtc	ttc	tca	tgc		1440
Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys		
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Ser	Val	Met	His	Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu		
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Val	Phe	Cys	Lys	Ala	Met	His	Val	Ala	Gln	Pro	Ala	Val	Val	Leu	Ala		
			20					25					30				•
Ser	Ser	Arg	Gly	Ile	Ala	Ser	Phe	Val	Cys	Glu	Tyr	Ala	Ser	Pro	Gly		

Lys		Thr	Glu	Val	Arg		Thr	Val	Leu	Arg		Ala	Asp	Ser	Gln
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Phe	Leu	Asp	Asp	Ser	Ile	Cys	Thr	Gly	Thr	Ser	Ser	Gly	Asn	Gln	Val
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Asn	Leu	Thr	Ile	Gln	Gly	Leu	Arg	Ala	Met	Asp	Thr	Gly	Leu	Tyr	Ile
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Glu	Val	Arg	Val	Thr	Val	Leu	Arg	Gln	Ala	Asp	Ser	Gln	Val	Thr	Glu
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225		1		9	230				1	235	- , -		- , -	-2-	240
<b>C</b> 1	T	Wa =	m	D===	D~-	D	m	<b>m.</b>	T c	C1 ···	T1-	C1	7.0-	C1	<b>ም</b> ኤ ~
GIU	Leu	met	ıyr	245	210	Pro	īÀī	TÀL	250	от Л	116	Gly	ASII	255	1111

GIN	. 11e	e Tyr	260		e Asp	) Pro	) Glu	265	Cys	Pro	Asp	Ser	27C		ı Pro
Lys	Ser	275		Lys	Thr	His	Thr 280		Pro	Pro	Cys	285		Pro	Glu
Leu	Leu 290		Gly	Pro	Ser	Val 295		Leu	. Phe	Pro	9rc 300		Pro	Lys	Asp
Thr 305		Met	Ile	Ser	Arg 310		Pro	Glu	Val	Thr 315		. Val	Val	Val	Asp 320
Val	Ser	His	Glu	Asp 325		Glu	Val	Lys	Phe 330		Trp	Tyr	· Val	Asp 335	
Val	Glu	Val	His 340		Ala	Lys	Thr	Lys 345	Pro	Arg	Glu	Glu	Gln 350	Tyr	Asn
Ser	Thr	Tyr 355	Arg	Val	Val	Ser	Val 360	Leu	Thr	Val	Cys	His 365	Gln	Asp	Trp
Leu	Asn 370	Gly	Lys	Glu	Tyr	Lys 375	Cys ·	Lys	Val	Ser	Asn 380	Lys	Ala	Leu	Pro
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Thr	Pro 450	Pro	Val	Leu	Asp	Ser 455	Asp	Gly	Ser	Phe	Phe 460	Leu	Tyr	Ser	Lys
Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys

465		470	475	i	480
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gag ctg	tta ata aa	a ata tac cc	c tca ggg gtt	att gga ctg	gtc cct 96
				Ile Gly Leu	
	20		25	. 30	•
-					
				tgt ccc caa	
His Leu	Gly Asp Ard	_	_	Cys Pro Gln	GIY Lys
	33	4	3	43	
tat atc	cac cct caa	a aat aat to	g att tgc tgt	acc aag tgc	cac aaa 192
Tyr Ile	His Pro Gli	n Asn Asn Se	r Ile Cys Cys	Thr Lys Cys	His Lys
50		55		60	
	tac ttg tac	aat gac tg	cca ggc ccg	ggg cag gat	acg gac 240
	m		- D 63 -	6161	The Are
65	Tyr Leu Tyr	Asn Asp Cys	Pro Gly Pro	Gly Gln Asp	Thr Asp 80

															•		
tgc	agg	gag	tgt	gag	agc	ggc	tcc	ttc	acc	gct	tca	gaa	aac	cac	ctc		288
Cys	Arg	Glu	Cys	Glu	Ser	Gly	Ser	Phe	Thr	Ala	Ser	Glu	Asn	His	Leu		
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Arg	His	Cys	Leu	Ser	Cys	Ser	Lys	Cys	Arg	Lys	Glu	Met	Gly	Gln	Val		
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145	0,0	001	Dea	Cys	150	11311	O ₁		<b>V</b>	155	Deu	Jei	Cys	GIII	160		
110					130					133					100		
222	can	aac	a.c.c	ata	tac	200	tac	cat	ac 2	aat	ttc	ttt	c+ a	202	<b>722</b>		528
					-				_			Phe		_	-		320
Dys	GIII	ASII	1111	165	Cys	1111	Cys	птэ		GLY	FIIE	rne	neu		GIU		
				105					170					175			
220	a = a	tat	at c	tcc	t a t	204	220	+ ~+	226		200	at a	~~~	+ ~ ~	200		E76
								_	_			ctg	_	-	_		576
MSII	GIU	Cys	180	261	Cys	Ser	ASII	_	гуу	туѕ	ser	Leu		Cys	1111		
-			180				•	185					190		•		
224	++~	+~~	a+ n														C2.4
												act	-				624
rys	ьeu		ьeu	Pro	GIN	тте		Asn	val	rys		Thr	GIU	Asp	Ser		
		195					200					·205					
								_	_			cac		_			672
GIA		Thr	Ата	GIu		-	Ser	Cys	Asp	Lys		His	Thr	Cys	Pro		
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Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	
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305					310					315					320	
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Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	
				325					330					335		
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Lys	Gly	Gln		Arg	Glu	Pro	Gln		Tyr	Thr	Leu	Pro		Ser	Arg	
			340					345					350			
-																
								-	ctg		_	-	-			1104
Asp	Glu		Thr	Lys	Asn	Gln		Ser	Leu	Thr	Cys		Val	Lys	Gly	
		355					360					365				
									tgg -							1152
Pne	-	Pro	ser	Asp			vaı	GIU	Trp	Glu		Asn	GIY	Gin	Pro	
	370					375					380					
~~~			+													1200
						_			gtg	-	-		_			1200
	ASN	ASN	ryr			rnr	Pro	Pro	Val		Asp	ser	Asp	_		
385					390					395				•	400	

				-	_						-			_	g cag n Gln		1248
				405					410					415	•		
ggg	aac	gtc	ttc	tca	tgc	tcc	gtg	atg	cat	gag	gct	ctg	cac	aac	cac		1296
Gly	Asn	Val			Cys	Ser	Val			Glu	Ala	Leu			His		
			420					425					430				
tac	acg	cag	aag	agc	ctc	tcc	ctg	tct	ccg	ggt	aaa			tg	a		1335
Tyr	Thr			Ser	Leu	Ser			Pro	Gly	Lys						
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1				5					10					15			
C1.,	T 011	T 011	Wa 1	C1	Tla	m	Dana	· ·	C1	17-3	T1-	C1	7	17-1	D		
GIU	теп	ьец	20	сту	116	Tyr	PLO	25	GIY	vai	116	сту	30	vai	PIO		
													7.7				
His	Leu	Gly	Asp	Arg	Glu	Lys	Arg	Asp	Ser	Val	Cys	Pro	Gln	Gly	Lys		
		35			÷		40					45					
•											-						
Tyr		His	Pro	Gln	Asn	Asn	Ser	Ile	Cys	Cys		Lys	Cys	His	Lys		
	50					55					60						
Glv	Thr	Tvr	Leu	Tvr	Asn	Asp	Cvs	Pro	Glv	Pro	Glv	Gln	Asp	Thr	Asp		
65		- 2 -		-,-	70		-1-		,	75	1	•			80		
Cys	Arg	Glu	Cys	Glu	Ser	Gly	Ser	Phe	Thr	Ala	Ser	Glu	Asn	His	Leu		
				85					90					95			
_		_	_		_		_	_									
Arg	His	Cys		Ser	Cys	Ser		_	Arg	Lys	Glu	Met	_	Gln	Val		
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Glu	Ile	Ser	Ser	Cys	Thr	Val	Asp	Arg	Asp	Thr	Val	Cys	Gly	Cys	Arg
		115					120					125			
Lys			Tyr	Arg	His	_	Trp	Ser	Glu	Asn		Phe	Gln	Cys	Phe
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145	Cys	Jer	Бец	Cys	150	VOII	GIY	1111	VGI	155	beu	Ser	Cys	GIII	160
1.0					100					100					100
Lys	Gln	Asn	Thr	Val	Cys	Thr	Cys	His	Ala	Gly	Phe	Phe	Leu	Arg	Glu
_				165	_		_		170	-				175	
Asn	Glu	Cys	Val	Ser	Cys	Ser	Asn	Cys	Lys	Lys	Ser	Leu	Glu	Cys	Thr
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Lys	Leu	Cys	Leu	Pro	Gln	Ile	Glu	Asn	Val	Lys	Gly	Thr	Glu	Asp	Ser
		195					200					205			
61	mh	m\	.	61	D	•	0	0		7	m\	•••	m 1	0	D
GIĀ	210	Thr	Ата	GIU	PIO	Lys 215	Ser	Cys	Asp	гÀг	Thr 220	HIS	THE	Cys	PIO
	210					213					220				
Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Glv	Glv	Pro	Ser	Val	Phe	Leu	Phe
225	-				230			-	-	235					240
Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val
				245					250					255	
Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe
			260					265					270		
	_	_								_		_	 .		_
Asn	Trp	1yr 275	vaı	Asp	GIA	vai	280	vai	HIS	Asn	Ala	ьуs 285	Thr	гуѕ	Pro
		275					200					203			
Ara	Glu	Glu	Gln	Tvr	Asn	Ser	Thr	Tvr	Ara	Val	Val	Ser	Val	Leu	Thr
,	290	•				295					300				
Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val
305					310					315					320

Jei	non	- Буз	AIG	325		nia	F,LO	116	330		, 1111	. IIe	. sei	335		<u>.</u>			
Lys	Gly	Gln	Pro 340	Arg	Glu	Pro	Gln	Val 345	Tyr	Thr	Leu	Pro	9rc		Arg	ſ			
Asp	Glu	Leu 355	Thr	Lys	Asn	Gln	Val 360	Ser	Leu	Thr	Cys	Leu 365		. Lys	Gly				
Phe	Tyr 370		Ser	Asp	Ile	Ala 375	Val	Glu	Trp	Glu	Ser 380		Gly	Gln	Pro				
Glu 385	Asn	Asn	Tyr	Lys	Thr 390	Thr	Pro	Pro	Val	Leu 395	_	Ser	Asp	Gly	Ser 400				
Ser	Phe	Leu	Tyr	Ser 405	Lys	Leu	Thr	Val	Asp 410	Lys	Ser	Arg	Trp	Gln 415			٠		
Gly	Asn	Val	Phe 420	Ser	Cys	Ser	Val	Met 425	His	Glu	Ala	Leu	His 430		His				
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								gcg Ala										41	đ
1			var i	5	401	11P	wT a	wra	10	wid	val	GIÀ	₽en	15	₽£ſ				

tgg	gct	gcg	gcg	cac	gcc	ttg	ccc	gcc	cag	gtg	gca	ttt	aca	ccc	tac		96
Trp	Ala	Ala	Ala	His	Ala	Leu	Pro	Ala	Gln	Val	Ala	Phe	Thr	Pro	Tyr		
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Ala	Pro	Glu	Pro	Gly	Ser	Thr	Cys	Arg	Leu	Arg	Glu	Tyr	Tyr	Asp	Gln		
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		_	_	_		_						Gln					
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	30					33					00						
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		-	-	-		•			_			Ala					
1		9	100					105					110		-		
gaa	caσ	aac	cac	atc	tac	acc	tac	aαα	ccc	aac	taa	tac	tac	aca	cta		384
-	-		_		-		-					Tyr					
024	02	115	9				120	9		,		125	-1-				
-		110					120					120			٠		
200	224	car	a a a	aaa	tac	caa	cta	tac	aca	cca	cta	cgc	nss	tac	cac		432
_												Arg					
Jei	130	GIII	GIU	Gry	Cys	135	Бец	Cys	ALG	110	140	,, <u>r</u>	כעב	Cyb	9		
	130					133					140						
~~~	~~~	++-	~~~	~+~	~~~	200		~~~	201	<b>~</b> ~ ~ ~	202	+ < 2	~~~	ata	ata		480
-					_	_				-		tca				•	400
	GIÀ	Pne	GIÀ	vai		Arg	Pro	сту	Thr		Thr	Ser	Asp	vai			
145					150					155					160		
																	F.0.0
_	_		_	_	_		_				_	act					528
Cys	Lys	Pro	Cys		Pro	Gly	Thr	Phe		Asn	Thr	Thr	Ser		Thr		
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Asp	Ile	Cys			His	Gln	Ile	Cys	Asn	Val	Val	Ala	Ile	Pro	Gly	
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Met	Ala	Pro	Gly	Ala	Val	His	Leu	Pro	Gln	Pro	Val	Ser	Thr	Arg	Ser	
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					230					233					240	
++0	cta	ctc	cca	ato	000	666	3.00	000	cca	act	<b>a</b> 2 2	~~~	200	~~~	+ 00	768
	_			_			-			•	-		-			766
Pne	теп	ьeu	PIO		GIY	PIO	ser	Pro	Pro	Ala	GIU	GIA	ser	-	ser	
				245					250					255		
				_	_				ggg	-			-	_	-	816
Gly	Asn	Ile		Leu	Val	Pro	His		Gly	Asp	Arg	Glu	_	Arg	Asp	
			260					265					270			
agt	gtg	tgt	ccc	caa	gga	aaa	tat	atc	cac	cct	caa	aat	aat	tcg	att	864
Ser	Val	Cys	Pro	Gln	Gly	Lys	Tyr	Ile	His	Pro	Gln	Asn	Asn	Ser	Ile	
		275					280					285				
tgc	tgt	acc	aag	tgc	cac	aaa	gga	acc	tac	ttg	tac	aat	gac	tgt	сса	912
Cys	Cys	Thr	Lys	Cys	His	Lys	Gly	Thr	Tyr	Leu	Tyr	Asn	Asp	Cys	Pro	
	290					295					300					
ggc	ccg	ggg	cag	gat	acg	gac	tgc	agg	gag	tgt	gag	agc	ggc	tcc	ttc	960
Gly	Pro	Gly	Gln	Asp	Thr	Asp	Cys	Arg	Glu	Cys	Glu	Ser	Gly	Ser	Phe	
305					310					315					320	
acc	gct	tca	gaa	aac	cac	ctc	aga	cac	tgc	ctc	agc	tgc	tcc	aaa	tgc	1008
									Cys		-	-			-	
	_			325			<b>5</b>		330			- , •		335	- , -	

		-													cgg Arg			1056
	-,, -		340	,				345			-7-		350		5		-	
			3.0					3.3					330					
gac	acc	ata	tat	aac	tac	agg	aaq	aac	caq	tac	caa	cat	tat	taa	agt			1104
-			-		-		_								Ser			
ПОР		355	-,-	1	· 1 -	9	360			- , -	9	365	- , -					
gaa	aac	ctt	ttc	caq	tac	ttc	aat	tqc	agc	ctc	tac	ctc	aat	aaa	acc			1152
-				_	-	Phe		-	-		-							
	370				- 4 -	375					380			_				
gtg	cac	ctc	tcc	tgc	cag	gag	aaa	cag	aac	acc	gtg	tgc	acc	tgc	cat			1200
						Glu												
385					390					395					400			
gca	ggt	ttc	ttt	cta	aga	gaa	aac	gag	tgt	gtc	tcc	tgt	agt	aac	tgt			1248
Ala	Gly	Phe	Phe	Leu	Arg	Glu	Asn	Glu	Cys	Val	Ser	Cys	Ser	Asn	Cys			
				405					410					415				
aag	aaa	agc	ctg	gag	tgc	acg	aag	ttg	tgc	cta	ccc	cag	att	gag	aat			1296
Lys	Lys	Ser	Leu	Glu	Cys	Thr	Lys	Leu	Cys	Leu	Pro	Gln	Ile	Glu	Asn			
			420					425					430					
gtt	aag	ggc	act	gag	gac	tca	ggc	acc	aca	gca	gag	ccc	aaa	tct	tgt			1344
Val	Lys	Gly	Thr	Glu	Asp	Ser	Gly	Thr	Thr	Ala	Glu	Pro	Lys	Ser	Cys			
		435					440					445						
-																••		
gac	aaa	act	cac	aca	tgc	сса	ccg	tgc	сса	gca	cct	gaa	ctc	ctg	ggg			1392
Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly			
	450					455					460							
gga	ccg	tca	gtc	ttc	ctc	ttc	ccc	сса	aaa	ccc	aag	gac	acc	ctc	atg		:	1440
Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met			
465					470					475					480			
atc	tcc	cgg	acc	cct	gag	gtc	aca	tgc	gtg	gtg	gtg	gac	gtg	agc	cac		:	1488
Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His			
				485					490					495				

caa	gac	cct	gag	gtc	aan	ttc	aac	taa	tac	ata	gac	aac	ata	gag	ata	•	1536
_	•			Val													1330
GIU	rsp	FIO	500	vai	БУЗ	1116	AJII	505	1 y L	VG.1	лэр	Gry	510	GIU	V41		
			300					303					310				
															***		1504
		-	_	aca	_	_							_	_			1584
HIS	Asn		гÀг	Thr	гÀг	Pro	_	GIU	GIU	GIN	Tyr		Ser	Thr	TYT		
		515					520					525					
																	1.600
		-	_	gtc			_	_		_	_		_				1632
Arg		Val	Ser	Val	Leu		Val	Leu	His	Gln	•	Trp	Leu	Asn	Gly	•	
	530					535					540						
-			_	tgc	_	_											1680
_	Glu	Tyr	Lys	Cys	_	Val	Ser	Asn	Lys		Leu	Pro	Ala	Pro			
545					550					555					560		
gag	aaa	acc	atc	tcc	aaa	gcc	aaa	ggg	cag	ccc	cga	gaa	cca	cag	gtg		1728
Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro		Val		•
				565					570					575			
		_		cca					_		-						1776
Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser		
			580					585					590				
ctg	acc	tgc	ctg	gtc	aaa	ggc	ttc	tat	ccc	agc	gac	atc	gcc	gtg	gag		1824
Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu		
		595					600					605				<u>.</u> .	
-																	
tgg	gag	agc	aat	ggg	cag	ccg	gag	aac	aac	tac	aag	acc	acg	cct	ccc		1872
Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro		
	610					615					620						
gtg	ctg	gac	tcc	gac	ggc	tcc	tcc	ttc	ctc	tac	agc	aag	ctc	acc	gtg		1920
Val	Leu	Asp	Ser	Asp	Gly	Ser	Ser	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val		
625					630					635					640		
gac	aag	agc	agg	tgg	cag	cag	ggg	aac	gtc	ttc	tca	tgc	tcc	gtg	atg		1968
Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met		
				645					650					655			

cat gag gct ctg cac aac cac tac acg cag aag agc ctc tcc ctg tct 2016 His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser 665 ccg ggt aaa 2028 Pro Gly Lys 675 <210> 26 <211> 675 <212> PRT <213> Homo sapiens <400> 26 Met Ala Pro Val Ala Val Trp Ala Ala Leu Ala Val Gly Leu Glu Leu 5 10 Trp Ala Ala Ala His Ala Leu Pro Ala Gln Val Ala Phe Thr Pro Tyr 20 25 Ala Pro Glu Pro Gly Ser Thr Cys Arg Leu Arg Glu Tyr Tyr Asp Gln 35 40 Thr Ala Gln Met Cys Cys Ser Lys Cys Ser Pro Gly Gln His Ala Lys 50 55 Val Phe Cys Thr Lys Thr Ser Asp Thr Val Cys Asp Ser Cys Glu Asp 65 70 Ser Thr Tyr Thr Gln Leu Trp Asn Trp Val Pro Glu Cys Leu Ser Cys 85 90 Gly Ser Arg Cys Ser Ser Asp Gln Val Glu Thr Gln Ala Cys Thr Arg 105 100 Glu Gln Asn Arg Ile Cys Thr Cys Arg Pro Gly Trp Tyr Cys Ala Leu 115 120

Ser	Lys		Glu	Gly	Cys	Arg		Cys	Ala	Pro	Leu 140	_	l Lys	Cys	Arg
Pro	Gly	Phe	Gly	Val	Ala	Arg	Pro	Gly	Thr	Glu	Thr	Ser	Asp	) Val	Val
145					150					155					160
Cys	Lys	Pro	Cys	Ala	Pro	Gly	Thr	Phe	Ser	Asn	Thr	Thr	Ser	Ser	Thr
				165					170					175	
Asp	Ile	Cys	Arg	Pro	His	Gln	Ile	Cys	Asn	Val	Val	Ala	Ile	Pro	Gly
			180					185					190		
Asn	Ala	Ser	Met	Asp	Ala	Val	Cys	Thr	Ser	Thr	Ser	Pro	Thr	Arg	Ser
		195					200					205			
Met	Ala	Pro	Gly	Ala	Val	His	Leu	Pro	Gln	Pro	Val	Ser	Thr	Arg	Ser
	210					215					220				
Gln	His	Thr	Gln	Pro	Thr	Pro	Glu	Pro	Ser	Thr	Ala	Pro	Ser	Thr	Ser
225					230					235			٠		240
Phe	Leu	Leu	Pro	Met	Gly	Pro	Ser	Pro	Pro	Ala	Glu	Gly	Ser	Gly	Ser
				245			•		250					255	
Gly	Asn	Ile	Ser	Leu	Val	Pro	His	Leu	Gly	Asp	Arg	Glu	Lys	Arg	Asp
			260					265					270		-
Ser	Val	Cvs	Pro	Gln	Glv	Lvs	Tyr	Ile	His	Pro	Gln	Asn	Asn	Ser	Ile
		275			2	-,-	280					285			
		2.0					200					200			
Cvs	Cvs	Thr	Lvs	Cvs	His	Lvs	Gly	Thr	Tvr	Leu	Tvr	Asn	Asp	Cvs	Pro
-1-	290		_, -	-,-		295	<b>-</b> _,		- , -		300			0,70	
	2,00	•				2 ) 3					300			•	
Gly	Pro	Gly	Gln	Asp	Thr	Asp	Cys	Arg	Glu	Cys	Glu	Ser	Gly	Ser	Phe
305					310					315					320
										•					-
Thr	Ala	Ser	Glu	Asn	His	Leu	Arg	His	Cys	Leu	Ser	Cys	Ser	Lys	Cys
				325					330					335	
Arg	Lys	Glu	Met	Gly	Gln	Val	Glu	Ile	Ser	Ser	Cys	Thr	Val	Asp	Arg

			340	)				345	5				350	)	
Asp	Th:	7 Va.		Gly	/ Cys	s Arç	360		n Gla	n Týi	r Arç	365	s Tyr	Trp	Ser
Glu	370		ı Ph∈	e Glr	n Cys	375		n Cys	s Sei	c Lei	380		ı Asn	Gly	' Thr
Val 385		Let	ı Ser	Cys	390		ı Lys	Glr	n Asr	395		. Cys	Thr	Cys	400
Ala	Gly	Phe	Phe	Leu 405		Glu	ı Asn	ı.Glu	410		. Ser	Cys	s Ser	Asn 415	_
Lys	Lys	Ser	Leu 420		Cys	Thr	Lys	Leu 425		Leu	Pro	Gln	1le 430	Glu	Asn
Val	Lys	Gly 435		Glu	Asp	Ser	Gly 440		Thr	Ala	Glu	Pro	Lys	Ser	Cys
Asp	Lys 450	Thr	His	Thr	Cys	Pro 455		Cys	Pro	Ala	Pro 460	Glu	Leu	Leu	Gly
Gly 465	Pro	Ser	Val	Phe	Leu 470	Phe	Pro	Pro	Lys	Pro 475	Lys	Asp	Thr	Leu	Met 480
Ile	Ser	Arg	Thr	Pro 485	Glu	Val	Thr	Cys	Val 490	Val	Val	Asp	Val	Ser 495	His
Glu	Asp	Pro	Glu 500	Val	Lys	Phe	Asn	Trp 505	Tyr	Val	Asp	Gly	Val 510	Glu	Val
His	Asn	Ala 515	Lys	Thr	Lys	Pro	Arg 520	Glu	Glu	Gln	Tyr	Asn 525	Ser	Thr	Tyr
Arg	Val 530	Val	Ser	Val	Leu	Thr 535	Val	Leu	His	Gln	Asp 540	Trp	Leu	Asn	Gly
Lys 545	Glu	Tyr	Lys	Cys	Lys 550	Val	Ser	Asn	Lys	Ala 555	Leu	Pro	Ala	Pro	Ile 560

Gl	u Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val
				565					570					575	
Ту	r Thr	Leu	Pro 580		Ser	Arg	Asp	Glu 585		Thr	Lys	Asn	Gln 590	Val	Ser
Le	u Thr	Cys 595		Val	Lys	Gly	Phe 600	Tyr	Pro	Ser	Asp	Ile 605	Ala	Val	Glu
Tr	Glu 610		Asn	Gly	Gln	Pro 615	Glu	Asn	Asn	Tyr	Lys 620	Thr	Thr	Pro	Pro
Va:	l Leu	Asp	Ser	Asp	Gly 630	Ser	Ser	Phe	Leu	Tyr 635	Ser	Lys	Leu	Thr	Val .640
Asp	Lys	Ser	Arg	Trp 645	Gln	Gln	Gly	Asn	Val 650	Phe	Ser	Cys	Ser	Val 655	Met
His	Glu	Ala	Leu 660	His	Asn	His	Tyr	Thr 665	Gln	Lys	Ser	Leu	Ser 670	Leu	Ser
Pro	Gly	Lys 675													